

REMARKS

Claims 11 to 26 are pending in the application. The Applicants have amended Claims 11, 12, 13 and 17 to particularly point out and distinctly claim the subject matter that the Applicants regard as their invention. The Applicants have further cancelled claim 14, without prejudice. Support for the present amendments is found throughout the specification and claims as originally filed. No new matter has been added and no claims fees are believed to be due. The Applicants strongly believe and respectfully urge that the present Amendments and accompanying Remarks have placed the present application in condition for allowance. Accordingly, timely and favorable action is respectfully requested.

Objection to page 8, line 4 of the Specification

The Examiner has objected to page 8, line 4 of the present specification, purportedly as said page contains an incomplete sentence. The Applicants respectfully direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended page 8, line 4 of the present specification to remove the purportedly incomplete sentence identified by the Examiner. In light of the present amendments, the Applicants respectfully request reconsideration and withdrawal of the objection to the present specification.

Rejection under 35 USC § 112, Second Paragraph

The Examiner has rejected Claims 12, 13 and 17 under 35 USC § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner asserts that Claim 12 recites the limitation "...said adjunct ingredients..." for which insufficient antecedent basis purportedly exists. The Examiner has further rejected Claims 13 and 17 for including a limitation claiming a process of adding a chelant having a calcium binding constant greater than 3, which purportedly contradicts page 16 of the present specification. The Applicants respectfully direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended the aforementioned claims only to obviate the Examiner's rejection and to particularly point out and distinctly claim the subject matter that the Applicants regard as their invention. Support for the present amendments is found throughout the present specification and claims, as originally filed and specifically on page 16 of the present application. In light of the present amendments, the Applicants respectfully request reconsideration and withdrawal of the rejection to Claims 12, 13 and 17 under 35 USC § 112, second paragraph.

Rejection under 35 USC § 102(b)/103(a) over Boskamp

The Examiner has rejected Claims 11 to 13, 15 to 24 and 26 under 35 USC § 102(b) as allegedly being anticipated by, or alternatively under 35 USC § 103(a) as allegedly obvious over US Patent Number 4,462,922 to Boskamp et al. Specifically, the Examiner asserts that Boskamp purportedly teaches an enzymatic liquid detergent composition comprising amine oxide, antioxidant, chelant, surfactant and other requisite limitations of the

present claims. The Applicants respectfully disagree with the Examiner's rejection. The Applicants respectfully direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended Claim 11, from which the balance of the pending claims ultimately depend, to particularly point out and distinctly claim the subject matter that the Applicants regard as their invention. Support for the present amendments is found throughout the specification and claims, as originally filed. In light of the present amendments, the Applicants wish to underscore that Boskamp neither teaches nor suggests an enzymatic liquid detergent composition comprising each and every element of amended Claim 11, and specifically the particular amine oxide now claimed therein. Accordingly, the Applicants respectfully request reconsideration and withdrawal of the rejection to Claims 11 to 13, 15 to 24 and 26 under 35 USC § 102(b), or alternatively under 35 USC § 103(a).

Rejection under 35 USC § 102(e) over Vinson

The Examiner has rejected Claims 11 to 13, 15 to 24 and 26 under 35 USC § 102(e) as allegedly being anticipated by US Patent Number 6,069,122 to Vinson et al (hereinafter "Vinson"). Specifically, the Examiner asserts that Vinson discloses the nonionic surfactants, enzymes and buffering agents of the present invention. The Applicants respectfully disagree with the Examiner's finding of anticipation. Initially, the Applicants wish to direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended Claim 11, from which the balance of the aforementioned claims ultimately depend, to particularly point out and distinctly claim the subject matter that Applicants regard as their invention, and to obviate the Examiner's rejection. In light of the present amendments, the Applicants wish to note and underscore to the Examiner that Vinson fails to anticipate each and every element of Claim 11 and specifically the particular amine-oxide now claimed therein. Reconsideration and withdrawal of the rejection to Claims 11 to 13, 15 to 24 and 26 under 35 USC § 102(e) are therefore respectfully requested.

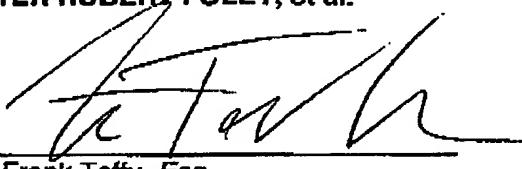
CONCLUSION

Attached hereto at the conclusion of this communication is a "Version With Markings To Show Changes Made." Applicants have made an earnest effort to place the present claims in condition for allowance. WHEREFORE, entry of the amendments provided herewith, reconsideration of the claims as amended in light of the Remarks provided, withdrawal of the claims rejections, and allowance of Claims 11 to 13, 15 to 26, as amended, are respectfully requested. In the event that issues remain prior to allowance of the noted claims, then the Examiner is invited to call Applicants' undersigned attorney to discuss any remaining issues.

Respectfully submitted,

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By



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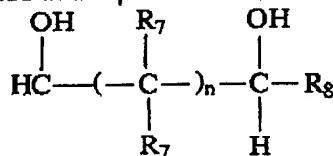
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VERSION WITH MARKINGS TO SHOW CHANGES MADEIn the specification

Please amend page 8 of the specification as follows:

It has been determined in the present invention that amylase enzymes are even less stable than other types of enzymes in the presence of hydrogen peroxide. (One particular amylase enzyme type that is less stable than even other types of amylase enzymes in the presence of hydrogen peroxide, is an α -amylase enzyme having a specific activity at least 25% higher than the specific activity of Termamyl α at a temperature range of 25°C to 55°C and at a pH value in the range of 8 to 10, measured by the Phadebas α -amylase activity assay.)

The addition of diols can also improve the enzymatic stability of a liquid dishwashing composition. Diols suitable for use in the present invention have the following formula:



wherein $n = 0-3$, $\text{R}_7 = \text{H}$, methyl or ethyl; and $\text{R}_8 = \text{H}$, methyl, ethyl, propyl, isopropyl, butyl and isobutyl. Preferred diols include propylene glycol, 1,2 hexanediol, 2-ethyl-1,3-hexanediol and 2,2,4-trimethyl-1,3-pentanediol. ~~When diols are present~~

While the deleterious effects are not as severe enzyme stability may also be adversely affected by certain citric acid and salts thereof (citrates), as is discussed below in the section on builder materials.

SURFACTANTS

The compositions of this invention comprise from about 5 % to about 90 %, more preferably from about 25 % to about 70 % by weight surfactant.

Anionic Surfactants - The anionic surfactants useful in the present invention are preferably selected from the group consisting of linear alkylbenzene sulfonate, alpha olefin sulfonate, paraffin sulfonates, alkyl ester sulfonates, alkyl sulfates, alkyl alkoxy sulfate, alkyl sulfonates, alkyl alkoxy carboxylate, alkyl alkoxylated sulfates, sarcosinates, taurinates, and mixtures thereof. An effective amount, typically from about 0.5% to about 90%, preferably about 5% to about 50%, more preferably from about 10 to about 30%, by weight of anionic detergents surfactant can be used in the present invention.

Suitable examples of anionic surfactants may be found in copending provisional patent application of Chandrika Kasturi et al., entitled "Liquid Detergent Compositions Comprising Polymeric Suds Enhancers", having P & G Case No. 6938P, serial no.

In the Claims

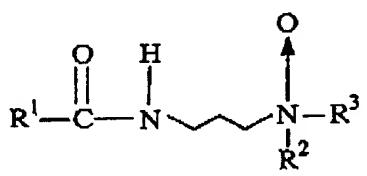
Please cancel Claim 14, without prejudice.

Please amend Claims 11, 12, 13 and 17 as follows:

Claim 11 (Once Amended). A process for making a liquid dishwashing detergent composition wherein said final composition comprises substantially no residual hydrogen peroxide, said process comprising the steps of:

- (c) combining an amine oxide containing residual hydrogen peroxide with an antioxidant to form a detergent premix wherein said premix contains less than 0.02% of hydrogen peroxide; and
- (d) adding an amylase enzyme to said detergent premix to form a detergent composition

wherein said amine oxide has the formula:



wherein R₁ is C₈-C₁₈ alkyl, 2-hydroxyalkyl, 3-hydroxyalkyl, 3-alkoxy-2-hydroxypropyl and mixtures thereof; R₂ and R₃ are each methyl, ethyl, propyl, isopropyl, 2-hydroxyethyl, 2-hydroxypropyl and mixtures thereof.

Claim 12 (Once Amended). A process according to Claim 11 wherein one or more surfactants are combined with said amine oxide and antioxidant in step (a); further wherein said process comprises one or more adjunct ingredients, said adjunct ingredients being selected from the group consisting of anionic surfactants, amphoteric surfactants, nonionic surfactants, and mixtures thereof.

Claim 13 (Once Amended). A process according to Claim 11 further comprising the step of adding a chelant, said chelant having a calcium ion binding constant, log K, of greater less than 3.

Claim 17 (Once Amended). A process according to claim 15 further comprising the step of adding a chelant, said chelant having a calcium ion binding constant, log K, greater of less than 3.

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CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8****TO: Examiner Kumar, Preeti - United States Patent and Trademark Office**

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I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office on 29 January 2003, to the above-identified facsimile number.

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- 1) Amendment Under CFR § 1.112
- 2)
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Number of Pages Including this Page:

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Inventor(s): Peter Robert Foley, et al

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